The Chair called the meeting to order at 5:01 p.m.

WELCOME & INTRODUCTION
Chair Mitchell, welcomed guests, staff and members to the 60th Annual Authority General Meeting and introduced CLOCA’s Board of Directors.

GREETINGS
Lorne Coe, MPP Whitby-Oshawa, presented Chair Mitchell and Chris Darling, CAO, with a certificate of congratulations to the Authority.

Jennifer French, MPP Oshawa, congratulated and thanked CLOCA staff and members for their work and accomplishments.

Councillor Gleed presented a certificate of appreciation on behalf of Regional Chair, Roger Anderson, and the Durham Regional Council.

Chris Darling, CAO, made a presentation, looking back at the 1st AGM (attached as H-1 to H-3)

PRESENTATIONS
Dianne Saxe, Environmental Commissioner of Ontario, made a presentation (attached as H-4 to H-49)

cont’d
2016 YEAR IN REVIEW – Chair Mitchel remarked on CLOCA’s 2016 accomplishments:
“It has been a pleasure to serve as Chair of Central Lake Ontario Conservation in 2016 and I would like to share with Board Members, guests and staff, a number of this year’s highlights which significantly support CLOCA’s Strategic Plan and vision of Healthy Watersheds for Today and Tomorrow.

- CLOCA issued 220 permits under the Ontario Regulation 42/06 to help protect the environment and people and property from natural hazards
- We undertook environmental restoration in the Enniskilien and Enfield Conservation Areas.
- CLOCA won the Conservation Area Workshop Innovation Award for the development of a simulated water drainage sandbox.
- Championed the Waterfront Regeneration Trust and the CN Railway to receive a Durham Environmental Advisory Committee Award for contributions to the health and wellness of our watersheds.
- Produced 1250 litres of Maple Syrup from 1200 taps at Purple Woods Conservation Area for a record breaking season
- Removed 500 Hazard Trees and as part of forest management plan, harvested 75 hectares of pine and spruce plantations at Long Sault
- Through our environmental monitoring program identified several Species at Risk Piping Plovers, American White Pelican, Bald Eagle, Bobolink and Bank Swallow, just to name a few.
- In partnership with Ducks Unlimited Canada, Ontario Federation of Anglers and Hunters and the Royal Ashburn Golf Club, raised $20,000 for wetland education.
- We planted 22,616 native trees on our lands in partnership with CN Railway, TD Tree Days and the RBC Foundation to restore 16 hectares of forest.
- We addressed Invasive Species in our watershed with 2 new active management projects for phragmites in Whitby and Clarington and we hosted 3 hands on workshops. For the 8th year in a row, we hosted a summer student in partnership with the Ontario Federation of Anglers and Hunters to deliver invasive species awareness programs to our watershed.
- We experienced extreme drought conditions in 2016, issuing 2 low water responses and collected monitoring data on conditions like dry creek tributaries, wetlands, ponds and low groundwater levels.
- With the assistance of the National Disaster Mitigation Program we initiated several studies to build a solid foundation for informed mitigation investments to reduce or negate the effects of flood events in the future.
- CLOCA hatched 54 native snapping turtles in partnership with 2 volunteers who participated in our nesting protection program in local wetlands.
- We continued to undertake significant restoration efforts for Oshawa Second Marsh, McLaughlin Bay and Bowmanville Marsh to improve habitat, water quality and quantity and public access features.
- Engaged 3,458 grade 4 and high school students, at the 19th annual Durham Children’s Groundwater Festival.
- 1082 volunteers contributed an estimated 5,685 hours of their own time in community stewardship activities in our watersheds.
- With our partners, we hosted 19 corporate events, provided 21 community and corporate presentations, attended 15 community events, delivered 9 curriculum based education programs to 13,058 students, produced 6 corporate communication products, engaged 954 volunteers who provided 5,429 hours of their time, and we hosted 440 people in our summer camp programs in partnership with the YMCA GTA and OPG Darlington.”

cont’d
At this point, the Chair called a 10-minutes break.

**DECLARATIONS** of interest by members on any matters herein contained
Councillor John Neal noted a conflict with Staff Report #5502-17, Permit #O16-345-GBH, Oshawa PUC Networks, as his spouse is an employee. Councillor Neal neither took part in discussion nor voted on the matter.

**ADOPTION OF MINUTES**
Res. #1 Moved by B. Chapman
Seconded by N. Pidwerbecki

*THAT the Authority minutes of November 15, 2016 be adopted as circulated.*
*CARRIED*

**ELECTION OF OFFICERS**
The 2016 elected officers vacated their positions, and C. Darling, Chief Administrative Officer, officiated the 2017 election of Chair.

Res. #2 Moved by B. Chapman
Seconded by A. Foster

*THAT in the event of a vote by ballot, Patricia Lowe and Perry Sisson be designated as scrutineers; and further that all election ballots be destroyed.*
*CARRIED*

**Authority Chair**
C. Darling made three calls for nominations, noting no seconder is required.

**Nominations:** D. Gleed nominated D. Mitchell

Res. #3 Moved by A. Foster
Seconded by J. Drumm

*THAT nominations for the position of Authority Chair be closed.*
*CARRIED*

D. Mitchell “stands”.

D. Mitchell was declared Authority Chair for 2017 and conducted the remainder of the meeting.

**Authority Vice-Chair**
D. Mitchell made three calls for nominations.

**Nominations:** J. Drumm nominated B. Chapman

Res. #4 Moved by J. Drumm
Seconded by D. Gleed

*THAT nominations for the position of Authority Vice-Chair be closed.*
*CARRIED*

cont’d
B. Chapman “stands”.
B. Chapman was declared Authority Vice-Chair for 2017.

SIGNING OFFICERS
Res. #5 Moved by A. Foster
Seconded by R. Hooper

THAT the Signing Officers of the Authority be any two of the following: The Chair, Vice-Chair, Chief Administrative Officer/Secretary-Treasurer, and Director of Corporate Services.
CARRIED

SOLICITORS
Central Lake Ontario Conservation Authority utilizes the services of six (6) legal firms:
- Beard, Winter – flood plain regulation advice and litigation
- Borden Ladner Gervais – property tax and related matters
- Boychyn & Boychyn – real estate and property transactions
- Gardiner, Roberts – land related matters – planning and regulation matters
- Hicks, Morley – employment and labour related matters
- Littler Canada - legal matters for personnel/human resources

Res. #6 Moved by B. Chapman
Seconded by D. Pickles

THAT the firms Beard, Winter, Toronto; Borden Ladner Gervais, Toronto; Boychyn & Boychyn, Oshawa; Gardiner, Roberts, Toronto; Hicks Morley, Toronto; and Littler Canada be appointed Solicitors for the Authority, as required.
CARRIED

BORROWING BY-LAW
Res. #7 Moved by A. Foster
Seconded by D. Pickles

THAT the Central Lake Ontario Conservation Authority’s signing officers are hereby authorized on behalf of the Central Lake Ontario Conservation Authority to borrow from time to time, from the banking institution under agreement with the Central Lake Ontario Conservation Authority, up to $1,000,000 to meet current expenditures until Provincial grants and/or Regional funding are received, with interest as may be determined by agreement between the bank and the Central Lake Ontario Conservation Authority.
CARRIED

CONSERVATION ONTARIO COUNCIL
Res. #8 Moved by A. Foster
Seconded by T. Rowett

THAT the Chair be appointed as the Authority’s representative on the Conservation Ontario Council. Alternative designates are the Vice-Chair and the Chief Administrative Officer.
CARRIED

cont’d
ENFORCEMENT OFFICERS

(i) Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulation #42/06

Res. #9 Moved by B. Chapman
Seconded by T. Rowett

THAT P. Sisson, T. Aikins, S. Gauley, J. Hetherington, C. Jones, J. Burgess, W. Coulter and M. Guindon be appointed Enforcement Officers under the Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulation #42/06.
CARRIED

(ii) Conservation Areas Regulation #101/92

Res. #10 Moved by B. Chapman
Seconded by T. Rowett

THAT T. Backus, H. Hirschfeld, J. Maas, B. De Waal and D. Hope be appointed Enforcement Officers under the Conservation Areas Regulation #101/92.
CARRIED

CORRESPONDENCE

(1) Correspondence from Glen Murray, Minister of Environment & Climate Change (Agenda pg. 1)
Re: Durham Region’s Proposal for Ontario Climate Change Resilience Fund

A. Foster inquired about the availability of funds. C. Darling noted that CLOCA staff are meeting with Regional staff on January 18, 2017.

Res. #11 Moved by A. Foster
Seconded by D. Pickles

THAT the correspondence be referred to Brian Kelly of the Region of Durham to review and clarify available funds.
CARRIED

(2) Minutes from Conservation Ontario Council Meeting #4/16 (Agenda pg. 3)
December 5, 2016

Res. #12 Moved by N. Pidwerbecki
Seconded by T. Rowett

THAT the above correspondence items be received for information.
CARRIED

cont’d
DEVELOPMENT REVIEW & REGULATION

(1) Staff Report #5502-17 (Agenda pg. 13)
Re: Permits Issued for Development, Interference with Wetlands and Alteration to Shorelines and Watercourses - November 1 to December 31, 2016

Councillor John Neal noted a conflict with Staff Report #5502-17, Permit #O16-345-GBH, Oshawa PUC Networks, as his spouse is an employee. Councillor Neal neither took part in discussion nor voted on the matter.

Res. #13 Moved by R. Hooper
Moved by T. Rowett

THAT Staff Report #5502-17 be received for information.
CARRIED

(2) Staff Report #5505-17 (Agenda pg. 17)
Re: Finalized Provincial Excess Soil Management Policy Framework

Councillor Drumm and John Neal requested that copies of the Policy Framework be made available to their municipal staff.

Res. #14 Moved by N. Pidwerbecki
Seconded by John Neal

THAT Staff Report #5502-17 be received for information.
CARRIED

DIRECTOR, ENGINEERING AND FIELD OPERATIONS

(1) Staff Report # 5504-17 (Agenda pg. 61)
Re: Canada 150 Community Infrastructure Program - Heber Down Conservation Area

Res. #15 Moved by J. Drumm
Seconded by B. Chapman

THAT Staff Report #5504-17 be received for information.
CARRIED

DIRECTOR, CORPORATE SERVICES

(1) Staff Report #5503-17 (Agenda pg. 65)
Re: BDO Canada Audit of Financial Statements for the Year Ended December 31, 2016

Res. #16 Moved by T. Rowett
Seconded by A. Foster

THAT the letter from Nigel A.C. Allen, BDO Dunwoody Canada LLP be received; and,
THAT Nigel A.C. Allen be advised that the Board of Directors is not aware of any matters related to increased risk, fraud or errors on behalf of management processes.
CARRIED

cont’d
CHIEF ADMINISTRATIVE OFFICER

(1) Staff Report #5501-17 (Agenda pg. 80)
Re: Common Membership – Different Boards

Res. #17 Moved by B. Chapman
Seconded by N. Pidwerbecki

THAT the Chair, Vice Chair and members of the Central Lake Ontario Conservation Authority for 2017 be the Chair, Vice Chair and members of the Central Lake Ontario Conservation Fund for 2017 and the Chair, Vice Chair and members of the Central Lake Ontario Source Protection Authority for 2017.
CARRIED

MUNICIPAL AND OTHER BUSINESS - NONE

ADJOURNMENT

Res. #18 Moved by B. Chapman
Seconded by A. Foster

THAT the meeting adjourn.
CARRIED

The meeting adjourned at 6:31 p.m.
60th Annual General Meeting

Looking Back
- CLOCA's Inception
- CLOCA held its 1st Board Meeting on September 23, 1958 at the Darlington Township Office in Hampton.
The 1958 Member Municipalities

- The Town of Bowmanville
- Clark Township
- Darlington Township
- City of Oshawa
- Pickering Township
- Reach Township
- Whitby Township
- Whitby East Township
- Town of Whitby

Past and Present
- Population growth

- 1958 our budget was 1,000 dollars which was divided in a 50/50 split between the member municipalities and the province.
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Facing Climate Change

January 17, 2017, Durham
Central Lake Ontario Conservation Authority

Dianne Saxe
Overview

1: Why am I here?
2: Why I care so much about climate change
3: Your opportunities
1: Why am I here?
Who is the ECO?

• Impartial, independent
• Guardian of the Environmental Bill of Rights
• Watchdog on:
  • Greenhouse gas emissions in Ontario
  • Energy conservation
  • Environmental protection
• Driven by what I have learned in the last year
Ontario’s journey to a low carbon economy
Too late for business as usual

• One of many examples:

• 2017 LTEP public consultation:
  • LTEP covers 70%+ of ON GHGs
  • All scenarios inconsistent with climate targets
  • No plausible mechanism to get even close
LTEP Scenarios
LTERP Scenarios

Projected energy sector greenhouse gas emissions:

- Outlook B
- Outlook C
- Outlook D
- Outlook E
- Outlook F

![Graph showing projected energy sector greenhouse gas emissions](image)
2: Why I care so much about climate change

Is it as bad as we thought?

It’s worse
Your colleagues may know

• 97% of climate scientists agree:

• Climate change is:
  • Human-caused
  • Caused mostly by greenhouse gases in the atmosphere that keep solar heat from escaping
  • Primary GHG is CO$_2$ from fossil fuels
  • Other key GHGs: methane, N$_2$O, refrigerants
  • Real
But do they know?

- **Climate change is:**
  - Here now and moving fast (last 12 months are “off the charts”)
  - $ trillions financial opportunity and threat
  - Immense impact on environment and people
  - Huge implications for Ontario infrastructure and economy

- We’re running out of time
Arthur, Percy: won’t have what we had
Highest ever CO₂ emissions

CO₂ emissions (Gt CO₂/yr)

2000–09
+3.4%/yr

1990–99
+1.1%/yr

Data: CDIAC/GCP/BP/USGS

Projection 2016
36.4 Gt CO₂

2015: 36.3 Gt CO₂

2015 emissions
63% larger than 1990
Where does the CO₂ go? (2006-2015)

Sources = Sinks

34.1 GtCO₂/yr
91%

16.4 GtCO₂/yr
44%

9%
3.5 GtCO₂/yr

31%
11.6 GtCO₂/yr

26%
9.7 GtCO₂/yr

Highest Air CO$_2$ in (Human) History

- Humans til 1750: 180 - 280
- 1750: 278
- 1860: 280
- 1988: 350
- 2016: 406 ppm

- Now permanently above 400 ppm
- Trapping extra heat
Not just CO₂

- ~50% more heat than CO₂ alone
- Methane
- Nitrous oxide
- Refrigerants
Only 1% of the Heat in the Air
Highest temperatures in human history
93% of the Extra Heat in Oceans, Lakes
Higher Sea Levels, Wilder Storms
20th Century “Normal” is Gone
More already locked in

- We've experienced this much warming so far...
- But we've put enough greenhouse gases into the air to create this much warming!
“Global Warming”?

- ≠ Everywhere always warmer
- Higher average temperatures
  - Unevenly distributed
  - Disrupting natural cycles
- More damaging, more unpleasant extremes

TOO HOT!  
TOO COLD!
Ontario: When, not if

- Milder winters
  - Ice roads, winter sports, snow cover
- Wetter springs, faster melts
- Hotter, drier summers
- Storms, floods, droughts
- Forest fire
- Invasive species
Canada’s Winter 2015/16
Case Study: Rideau Canal Skateway

- World’s largest skating rink
- Economically and culturally important – nearly a million visitors / year
- Becoming unreliable
- Open only 18 days in 2016
Case Study: Lake Simcoe Ice Fishing

- Regional economic and social/cultural importance.
- Since 1989, ice cover has decreased by one day each year.
- Could disappear entirely within 50 years.
Ontario Warming Faster Than Average

• Number of frost-free days in Ontario increased by 18 days between 1979 and 2009.

18 days over 30 years

Ontario: When, not if

- Health impacts, e.g. more:
  - Infectious diseases
  - Extreme weather events
  - Extreme heat
  - Poor air quality
  - Water stress
2016 Drought

Conditions as of July 31, 2016
Catastrophic Insured Losses - Canada

![Chart showing catastrophic insured losses in Canada from 1983 to 2015. The chart highlights significant events such as the Quebec Floods, Eastern Ice Storm, Ontario Wind and Rain, Alberta and Toronto Floods, Fort McMurray Fire, and Windsor Floods. The x-axis represents the years from 1983 to 2015, and the y-axis represents losses in billions of 2015 dollars. The chart also indicates an estimated trend line.](image-url)
How Much Worse? Depends on Emissions
Because emissions skyrocketed

2015 emissions 63% larger than 1990
And are still growing

Source: BP 2016; Jackson et al 2015; Global Carbon Budget 2016
Not much time left
Carbon budget running out

If we want a 2/3 chance of staying <2°C, only 16% of proven fossil fuel reserves can be burned.
What else have we unleashed?

- Permafrost
- Soil carbon loss
- Forest die-back
- Ocean current changes
- Loss of sea ice (albedo)...

- What would a tipping point look like?
Global Sea Ice

Graph showing global sea ice area from NSIDC sea ice concentration data. The graph indicates fluctuations in sea ice area from 1978 to 2016, with peaks and troughs indicating seasonal variations.

Last date: 2016-12-12

Graph by Wipneus
3: Opportunities
Who makes a difference?

- Most people wish they could

**You do**

- You know best the opportunities in your CA and municipalities
  - Mitigation
  - Adaptation

- Congratulations on Durham leadership
After Action Plan: still a huge gap

- Mitigation
  - How can Ontario build a low carbon economy?
  - Offsets

- Adaptation
  - What will make Ontario resilient?

- All hands to the pump
- Many risks, opportunities and co-benefits
Co-benefits

• Innovation
• Energy efficiency
• Better air quality
  • E.g. No coal plants, no smog days!
• Better human health
• Lower costs
  • E.g. green infrastructure
• Etc.
E.g. Soil carbon

- Carbon sink
- Better resilience to floods, droughts
- Better nutrition in food
- Less erosion, pollution
- Biodiversity
- Fewer pests and pesticides

- Why subsidize diesel use instead?
What you do now matters

• Part of the solution or part of the problem?

• What would be different if you put a climate lens on:
  • Procurement
  • Funding
  • Incentives
  • Regulations
  • Policies
  • Permitting
  • Planning?
World Average Air Temperature